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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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IP Administration
Legal Department, M/S 35
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EXAMINER

CHEN, WENPENG

ART UNIT PAPER NUMBER

2624

DATE MAILED: 10/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/721,947

Applicant(s)

ADILETTA ET AL.

Examiner

Wenpeng Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 and 11-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 7-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/25/2003
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

Election

1. This application contains claims directed to the following patentably distinct species, all classified 382/239, of the claimed invention:

Species I -- Claims 1-5, drawn to Fig. 10, directed to adaptive coding based on statistical information of image frames;

Species II -- Claims 7-10, drawn to Fig. 6D, directed to adaptive coding based on comparing a difference of image frames with an adaptive threshold level;

Species III -- Claims 6 and 11-20, drawn to Fig. 21, directed to adaptive coding based on motion characteristics of image frames (this species being elected for examination in the parent case 09/613,359, now US patent 6,760,478.)

The operating principle is different for each species group.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

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the election, applicant must indicate which are readable upon the elected species. MPEP

§ 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Ms. Mary Lou Wakimura on 10/14/2004 a provisional election was made without traverse to prosecute the invention of Species II, claims 7-10. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-6 and 11-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

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4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicants' cooperation is requested in correcting any errors of which applicant may become aware in the specification.

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

6. The abstract of the disclosure is objected to because it does not reflected the claimed subject matters. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 7-10 are rejected under 35 U.S.C. 112, first paragraph, because of the following reason. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to carry out the invention commensurate in scope with these claims.

The specification, while being enabling for "calculating a difference value from a current image and a prior image in a compare module", does not reasonably provide enablement for

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"calculating a current image to a prior image difference value in a compare module", because the difference value is related to the current image and is thus not a prior image difference value.

See the related specification reproduced below:

"The third possible case for comparison module 59a is that a difference in the current image block versus the previous block exists. In this case the macroblock image difference value (which is also known as an error vector) is

transmitted to logic block 59d, where the difference is quantified. Logic decision block 59e compares the difference value to a set threshold value. If the difference value is less than the set threshold value, logic block 59f

transmits the calculated difference value to the adaptive threshold calculation module 59g. Module 59g subtracts the calculated difference value from the current threshold value and transmits the new (lower) threshold value back to

logic decision block 59e for use the next time this particular macroblock is evaluated. Module 59g also sends the image data to the default dump 59c. It can be seen that in logic decision block 59e, the value of the threshold

declines from the preset point by whatever the difference value is between the present macroblock and the previously transmitted macroblock. Thus there is a tendency for the threshold point in block 59e to decline from the set point toward zero as any information differences occur in the macroblocks."

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 7-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for the following reasons.

Claims 7 and 9 recite the limitation "calculating a current image to a prior image difference value in a compare module". The meaning of the limitation is not clear.

Claim interpretation

11. For comparing Claims 7-10 over the prior art, the Examiner made the interpretation:

-- replace "calculating a current image to a prior image difference value in a compare module" with "calculating a difference value from a current image and a prior image in a compare module" in Claims 7 and 9.

Examiner's Comments

12. The interpreted Claims 7-10 are not rejectable over the prior art.

The following is a statement of reasons for this conclusion. The prior art fails to teach the systems of the interpreted Claims 7 and 9 which specifically comprise the following features in combination with other recited limitation:

-- calculating a difference value from a current image and a prior image in a compare module;

-- comparing said difference value to a variable adaptive threshold level, if said *difference value is less than the current value of* said variable *adaptive threshold* level, *subtracting said difference value from* said current value of said variable *adaptive threshold* value, thereby *producing a new* current value of said variable *adaptive threshold* level, and *deleting said video signal*,

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if said *difference value exceeds* said variable *adaptive threshold* value, *resetting* said variable *adaptive threshold* to a predetermined beginning threshold value.

The references listed in form PTO-892 and IDS are most relevant to Claims 7 and 9. Although some teach "comparing a difference value to a threshold for deciding deleting of video signal," none teaches "subtracting a difference to produce a new adaptive threshold for deciding deletion of video signal."

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wenpeng Chen whose telephone number is 703 306-2796. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on 703 308-7452. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications. TC 2600's customer service number is 703-306-0377.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4700.

Wenpeng Chen
Primary Examiner
Art Unit 2624

October 21, 2004

